

**In the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1 1. (Currently Amended) A color-separating and -recombining optical system  
2 comprising:  
3 cubic- or square column-like first to fourth polarization beam  
4 splitters having polarization-splitting planes intersecting each other like a  
5 character-"X"; and  
6 wavelength-selective polarizing converters each for rotating the  
7 plane of polarization of a specific-color light component by 90 degrees,  
8 one of the converters being placed at a light-incident side of the first  
9 splitter, another of the converters being placed at a light-emitting side of  
10 the fourth splitter, the first and the fourth splitters being provided at a  
11 light-incident side and a light-emitting side, respectively, of the optical  
12 system, the first and the fourth splitters being arranged as diagonally  
13 opposing each other, and the remaining converters being placed  
14 between at least two inner facing planes of the first to the fourth splitters,  
15 wherein at least the remaining converters and three of the first to  
16 the fourth splitters are joined ~~each other~~ to form an optical joint  
17 component with a gap located between the remaining one splitter and  
18 the optical joint component.
- 1 2. Canceled.
- 1 3. (Original) The color-separating and -recombining optical system  
2 according to claim 1, wherein opto-elastic constants for the first to the  
3 fourth polarization beam splitters have a relationship  $K_i < K_m$  and  $K_o$  in  
4 which  $K_i$ ,  $K_m$  and  $K_o$  denote the opto-elastic constants for the first  
5 splitter, the second and the third splitters and the fourth splitter,  
6 respectively.

- 1     4.     (Original) The color-separating and -recombining optical system  
2           according to claim 1, wherein opto-elastic constants for the first to the  
3           fourth polarization beam splitters have a relationship  $K_i$  and  $K_m < K_o$  in  
4           which  $K_i$ ,  $K_m$  and  $K_o$  denote the opto-elastic constants for the first  
5           splitter, the second and the third splitters and the fourth splitter,  
6           respectively.
- 1     5.     (Original) The color-separating and -recombining optical system  
2           according to claim 1, wherein opto-elastic constants for the first to the  
3           fourth polarization beam splitters have a relationship  $K_i < K_m < K_o$  in  
4           which  $K_i$ ,  $K_m$  and  $K_o$  denote the opto-elastic constants for the first  
5           splitter, the second and the third splitters and the fourth splitter,  
6           respectively.
- 1     6.     (Original) A color-separating and -recombining optical system comprising:  
2           cubic- or square column-like first to fourth polarization beam  
3           splitters having polarization-splitting planes intersecting each other like a  
4           character-"X"; and  
5           wavelength-selective polarizing converters each for rotating the  
6           plane of polarization of a specific-color light component by 90 degrees,  
7           one of the converters being placed at a light-incident side of the first  
8           splitter, another of the converters being placed at a light-emitting side of  
9           the fourth splitter, the first and the fourth splitters being provided at a  
10          light-incident side and a light-emitting side, respectively, of the optical  
11          system, the first and the fourth splitters being arranged as diagonally  
12          opposing each other, and the remaining converters being placed  
13          between at least two inner facing planes of the first to the fourth splitters,  
14          wherein opto-elastic constants for the first to the fourth splitters  
15          have a relationship  $K_i < K_m$  and  $K_o$ ,  $K_i$  and  $K_m < K_o$  or  $K_i < K_m < K_o$  in  
16          which  $K_i$ ,  $K_m$  and  $K_o$  denote the opto-elastic constants for the first

17 splitter, the second and the third splitters and the fourth splitter,  
18 respectively.

1 7. Canceled.

1 8. Canceled.

1 9. Canceled.

1 10. Canceled.

1 11. (Currently Amended) A projection display comprising:  
2 a light source for emitting unlinearly-polarized light;  
3 a first polarizer to allow only a first specific-linearly-polarized light  
4 component of the unlinearly-polarized light to pass therethrough;  
5 a color-separating and -recombining optical system including  
6 cubic- or square column-like first to fourth polarization beam splitters  
7 having polarization-splitting planes intersecting each other like a  
8 character-"X", the first splitter being provided as facing the first polarizer,  
9 and wavelength-selective polarizing converters each for rotating the  
10 plane of polarization of a specific-color light component by 90 degrees,  
11 one of the converters being placed at a light-incident side of the first  
12 splitter, another of the converters being placed at a light-emitting side of  
13 the fourth splitter, the first and the fourth splitters being provided at a  
14 light-incident side and a light-emitting side, respectively, of the optical  
15 system, the first and the fourth splitters being arranged as diagonally  
16 opposing each other, and the remaining converters being placed  
17 between at least two inner facing planes of the first to the fourth splitters,  
18 wherein at least the remaining converters and three of the first to the  
19 fourth splitters are joined ~~each other~~ to form an optical joint component  
20 with a gap located between the remaining one splitter and the optical  
21 joint component;

22                   reflective spatial light modulators for light modulation in  
23                   accordance with a video signal, provided outside the optical system, as  
24                   facing each light-passing plane of the second and the third splitters,  
25                   a second polarizer provided as facing a light-emitting side plane of  
26                   the fourth splitter, to allow only a second specific-linearly-polarized light  
27                   component emitted from the light-emitting side plane of the fourth splitter  
28                   to pass therethrough; and  
29                   a projection lens provided as facing the second polarizer, to  
30                   receive the second specific-linearly-polarized light component for image  
31                   projection.

1    12.   (Original) A projection display comprising:  
2                   a light source for emitting unlinearly-polarized light;  
3                   a first polarizer to allow only a first specific-linearly-polarized light  
4                   component of the unlinearly-polarized light to pass therethrough;  
5                   a color-separating and -recombining optical system including  
6                   cubic- or square column-like first to fourth polarization beam splitters  
7                   having polarization-splitting planes intersecting each other like a  
8                   character-"X", the first splitter being provided as facing the first polarizer,  
9                   and wavelength-selective polarizing converters each for rotating the  
10                  plane of polarization of a specific-color light component by 90 degrees,  
11                  one of the converters being placed at a light-incident side of the first  
12                  splitter, another of the converters being placed at a light-emitting side of  
13                  the fourth splitter, the first and the fourth splitters being provided at a  
14                  light-incident side and a light-emitting side, respectively, of the optical  
15                  system, the first and the fourth splitters being arranged as diagonally  
16                  opposing each other, and the remaining converters being placed  
17                  between at least two inner facing planes of the first to the fourth splitters,  
18                  wherein opto-elastic constants for the first to the fourth splitters have a  
19                  relationship  $K_i < K_m$  and  $K_o$ ,  $K_i$  and  $K_m < K_o$  or  $K_i < K_m < K_o$  in which  
20                   $K_i$ ,  $K_m$  and  $K_o$  denote the opto-elastic constants for the first splitter, the  
21                  second and the third splitters and the fourth splitter, respectively;

22                   reflective spatial light modulators for light modulation in  
23                   accordance with a video signal, provided outside the optical system, as  
24                   facing each light-passing plane of the second and the third splitters,  
25                   a second polarizer provided as facing a light-emitting side plane of  
26                   the fourth splitter, to allow only a second specific-linearly-polarized light  
27                   component emitted from the light-emitting side plane of the fourth splitter  
28                   to pass therethrough; and  
29                   a projection lens provided as facing the second polarizer, to  
30                   receive the second specific-linearly-polarized light component for image  
31                   projection.

1    13.   Canceled.

1    14.   Canceled.

1    15.   Canceled.

1    16.   Canceled.

1    17.   Canceled.

1    18.   Canceled.

1    19.   Canceled.

1    20.   Canceled.